

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GYANENDRA GUPTA

Appeal No. 1997-0846
Application No. 08/474,950

ON BRIEF

Before, JOHN D. SMITH, PAK and WALTZ, **Administrative Patent Judges**

JOHN D. SMITH, **Administrative Patent Judge.**

DECISION ON APPEAL

This is an appeal pursuant to 35 U.S.C. § 134 from the final rejection of claims 1 through 8 and 35 through 42.

Representative claims 1, 36, and 37 are reproduced below:

1. A removable, non-brittle, water soluble thermoplastic spacer for use to space an electrical

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component from a printed wiring board to which the electrical component will be attached which comprises:

(a) a shaped mixture of

(i) an injection moldable solid mixture of partially hydrolyzed polyvinyl alcohol resin, and

(ii) fully hydrolyzed polyvinyl alcohol resin,

(b) said mixture being capable [sic: of] retaining its shape at the printed wiring board fabrication and soldering temperatures encountered.

36. The spacer of claim 1 further including a printed wiring board having an aperture therein, said spacer disposed about said aperture, and an electrical component having a wire extending therefrom, said electrical component resting on said spacer and said wire extending through said spacer and into said aperture.

37. A removable, non-brittle, water soluble thermoplastic spacer for use to space an electrical component from a printed wiring board to which the electrical component will be attached which comprises:

(a) an injection moldable member having a central aperture extending therethrough

(b) of a water soluble thermoplastic polymer

(c) which retains its shape at the printed wiring board fabrication and soldering temperatures encountered.

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The reference of record relied on by the examiner is:

Baechtold 3,300,546 Jan. 24, 1967

Appealed claims 2 through 4 stand rejected under 35 U.S.C.

§ 112, second paragraph, as indefinite. All appealed claims

stand rejected under 35 U.S.C. § 103 as unpatentable over Baechtold in view of Admitted Prior Art.

Neither rejection can be sustained.

The subject matter on appeal relates to a removable, non-brittle, water soluble thermoplastic spacer for use to space an electrical component from a printed wiring board to which the electrical component will be attached. Appealed claim 1 defines the spacer as comprising a shaped mixture of an injection moldable solid mixture of partially hydrolyzed polyvinyl alcohol resin, and a fully hydrolyzed polyvinyl alcohol resin. This mixture is further defined as being capable of retaining its shape at the printed wiring board fabrication and soldering temperatures encountered. Additionally, appealed claim 36 is directed to the combination of the spacer, a printed wiring board, and an electrical

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component. Appealed claim 37 defines the spacer broadly in terms of a water soluble thermoplastic polymer which retains its shape at the printed wiring board fabrication and soldering temperatures encountered, but additionally requires that the spacer have a central aperture extending therethrough. Appealed dependent claims 40 and 41 define the spacer as a toroid.

Appealed claims 2 through 4 stand rejected under 35 U.S.C.

§ 112, second paragraph, as indefinite. Apparently, the examiner considers that the claim language "selected" renders the claims indefinite under this section of the statute. See appellant's brief at page 4. However, we agree with appellant that the claims do, in fact, set out and circumscribe a particular area with a reasonable degree of precision and particularity. Hence, we do not sustain the examiner's rejection of appealed claims 2 through 4 under this section of the statute.

We now turn to the examiner's obviousness rejection of the appealed claims as unpatentable over Baechtold in view of

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Admitted Prior Art. Essentially, for the reasons set forth in appellant's brief, we do not find the stated rejection to be well taken. As emphasized by appellant, the appealed claims are directed to a removable, non-brittle, water soluble thermoplastic spacer for use to space an electrical component from a printed circuit wiring board to which the electrical component will be attached. Baechtold does not relate to the technology of concern to appellant. What Baechtold's described invention relates to is a water-soluble, heat-sealable film material suitable for use

- 1) as a water soluble wrap or
- 2) for fabrication into water-soluble envelopes.

Baechtold's film material and water soluble wrap is used for the packaging of household materials intended to be dissolved or dispersed in water, for example, soap powder or detergent powder. That appellant acknowledges (specification page 2) that wash away lactose spacers have been used to space an electrical component from a printed wiring board in the prior art does not aid the examiner's rejection, since there is no indication in Baechtold that the prior art water-soluble film and wrap material would overcome the problems relating to the use of the prior art lactose

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spacers which are described as "brittle, difficult to handle and can prematurely break before or during flow solder processing, creating massive rework and scrap of printed wiring boards." See the specification at page 2, lines 23 through 25. Accordingly, the examiner's stated rejection of the appealed claims for obviousness cannot be sustained.

The decision of the examiner is reversed.

OTHER ISSUES

Contrary to appellant's statement in his brief on appeal that there are no known related appeals or interferences, we direct the examiner's attention to Appeal No. 97-3102 which is an appeal from the rejection of related subject matter in Serial No.

08/476,526 filed June 7, 1995. A copy of our decision in the related appeal which is being mailed on even date is attached to this decision.

Prior to taking any further action in the present application, the examiner should carefully consider the patentability issues raised based on the Caravona patent in

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the related appeal, and the potential applicability of
Caravona to the claims in the present appeal.

The decision of the examiner is reversed.

REVERSED

JOHN D. SMITH)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
CHUNG K. PAK)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
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THOMAS A. WALTZ)	
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